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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,660	10/24/2003	Raymond W. McCollum	MS306456.1/MSFTP520US	9925
27195 7590 03/20/2007 AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER WEI, ZHENG	
			ART UNIT 2192	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Interview Summary	Application No. 10/692,660	Applicant(s) MCCOLLUM ET AL.	
	Examiner Zheng Wei	Art Unit 2192	

All participants (applicant, applicant's representative, PTO personnel):

(1) Tuan Q. Dam.

(3) Asmita Chande.

(2) Zheng Wei.

(4) Bradley D. Spitz (Reg. #: 59,920).

Date of Interview: 13 March 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☒ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
If Yes, brief description: _____.

Claim(s) discussed: 1.


Identification of prior art discussed: Bigus et al., US 2004/0083454.

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Briefly discussed about the invention and the Applicant proposed amendment of claim 1. Applicant pointed out that the rule in the application can be decomposed into a subset of instructions and said instructions can be executed out-of-order. The Applicant further pointed out that the cited prior art does not teach above features. The Examiner pointed out that Figure 2B may cast some lights into such manner.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.


TUAN DAM
SUPERVISORY PATENT EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

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Date: February 28, 2007
TO: Wei Zheng – United States Patent and Trademark Office
FAX NO.: 571-270-2059
FROM: Himanshu Amin and Asmita Chande

In re patent application of:

Applicant(s): Raymond W. McCollum, et al.

Examiner: Zheng Wei

Serial No: 10/692,660

Art Unit: 2192

Filing Date: October 24, 2003

Title: RULES DEFINITION LANGUAGE

TOTAL NUMBER OF PAGES (INCLUDING THIS PAGE): 7

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Dear Examiner Wei:

Thank you for the opportunity to discuss this matter. The following agenda is provided to aide our discussion.

- I. Introduction
- II. Discussion of Rejection of Claims under 35 U.S.C. §102(e)
 - a. Discuss independent claims and proposed amendments
 - i. Independent claims 1, 20 and 27 relate to a computer program product comprising statements for composing a rule such that the rule can be decomposed into a subset of instructions that are processed asynchronously to facilitate at least one of testing assertions, enforcing constraints using runtime information, making inferences, performing correlation, or communicating results of dynamic tests to other components.
 - b. Discuss deficiencies of the cited references
 - i. Bigus *et al.* relates to a rule-based programming language comprising a single rule language supporting a plurality of rulesets, an object-oriented framework that compiles the rulesets into a collection of framework objects and one or more pluggable inference engines for processing the collection of framework objects. In particular, the rule-based language is a collection of declarative and procedural statements that can be actively interpreted or processed by an inference engine. These statements, however, are executed as a whole such that an engine would employ computer resources to evaluate an entire statement before attempting to evaluate the next statement.
 - ii. As disclosed in the applicants' claims, a rules definition language allows each rule to be broken down into a number of instructions that can be executed asynchronously. A rules engine is employed for efficient asynchronous processing of each instruction such that system resources are not over burdened. Thus a complex rule can be

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decomposed into simpler instructions that can be executed out-of-order and can pass messages to each other as they complete pieces of the rule.

- iii. The cited reference differs from the applicants' claims since Bigus *et al.* executes each rule as a whole and fails to disclose a method to facilitate out-of order execution of instructions obtained by decomposing a rule.

Attached, please find proposed claim amendments with respect to the above-referenced matter. Thanks again for your time and consideration.

Best regards,

- Himanshu and Asmita

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PROPOSED AMENDMENTS

1. (Currently Amended) A ~~computer program product including a computer readable~~ medium having computer readable executable program code embodied thereon for performing the following act for the authoring of rules; ~~the computer program product comprising statements for~~

composing a rule such that the rule can be decomposed into a subset of instructions that are processed ~~concurrently~~ asynchronously to facilitate at least one of testing assertions, enforcing constraints using runtime information, making inferences, performing correlation, or ~~and~~ communicating results of dynamic tests to other components.

2. (Original) The product of claim 1, at least one of the statements facilitates activating the rule for processing.

3. (Currently Amended) The product of claim 1, at least one of the statements facilitates activating the rule according to least one of a ~~regular basis and~~ periodically or on detection of an event.

4. (Original) The product of claim 1, one or more of the statements facilitates performing a continuous polling loop.

5. (Original) The product of claim 4, the polling loop is performed according to a polling interval such that the polling loop executes and then waits for the polling interval to expire before executing a next polling loop.

6. (Currently Amended) The product of claim 4, the polling loop is facilitated according to a keyword that includes at least one of a variable, an object, [[and]] or a constant.

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7. (Original) The product of claim 1, the rule executes concurrently with another rule.
8. (Currently Amended) The product of claim 1, at least one of the statements facilitate creating at least one of an implicit task [[and]] or an explicit task, wherein the explicit task is created by explicitly specifying a keyword and an explicit task object, and the implicit task is created when a startup attribute is used on the rule .
9. (Currently Amended) The product of claim 8, at least one of the statements facilitates explicit task declaration of [[an]] the explicit task object for the explicit task, and use of a statement that launches concurrent execution of the rule.
10. (Currently Amended) The product of claim 1, at least one of the statements facilitates creating a task using one of a startup attribute [[and]] or a signaling attribute.
11. (Original) The product of claim 1, at least one of the statements facilitates allowing the rule to invoke another rule.
12. (Original) The product of claim 1, at least one of the statements facilitates separating rule logic data from rule configuration data using at least one parameter.
13. (Currently Amended) The product of claim 12, the at least one parameter is passed by one of a value [[and]] or by reference.
14. (Currently Amended) The product of claim 1, the rule is an independent rule authored using at least one of an infinite loop [[and]] or an event-driven callback.
15. (Original) The product of claim 14, the event-driven callback facilitates asynchronous delivery of a data item from a URI-based source.

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16. (Original) The product of claim 1, the rule is subscribed to reveal events at one time.
17. (Currently Amended) The product of claim 1, at least one of the statements facilitates collecting at least two data items concurrently ~~substantially simultaneously~~, when the at least two data items become available.
18. (Original) ~~A computer system according to~~ The computer readable medium of claim 1, embodied within a device.
19. (Original) The product of claim 1, one or more of the statements facilitates at least one of automated rule instantiation based on XML, built-in polling without threading or concurrency considerations, and automated logging of rule instance information in alerts.
20. (Currently amended) ~~A computer program product including a computer readable medium having computer~~ executable readable program code embodied thereon for providing a method that performs the act of authoring rules for asynchronous processing, the method comprising, composing a rule of one or more statements that facilitate decomposing the rule into a subset of instructions that are processed asynchronously ~~concurrently~~, the rules processed to perform at least one of testing assertions, enforcing constraints using runtime information, making inferences, performing correlation, and or communicating results of dynamic tests to other components.
21. (Currently Amended) The method of claim 20, further comprising extension ~~extensioning~~ of the rule with constructs without modifying the rule, the extension ~~extensioning~~ is performed by one of,
 extending the rule to allow an alternate test before allowing the rule to fail;
 constraining the rule to make the test more stringent; [[and]] or
 hooking the rule.

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22. (Original) The method of claim 20, further comprising forwarding a log event to a supervisor in accordance with the one or more statements of the rule.
23. (Original) The method of claim 20, further comprising forwarding a log event using a function in accordance with the one or more statements of the rule, the log event forwarded to a supervisor that deployed the rule from which the function is called.
24. (Original) The method of claim 20, further comprising forwarding an alert using a function in accordance with the one or more statements of the rule, the alert forwarded to a supervisor that deployed the rule from which the function is called.
25. (Original) The method of claim 20, further comprising,
consolidating a plurality of events; and
reporting a consolidated event summary based on the consolidated events according to a predetermined time interval.
26. (Original) The method of claim 20, further comprising monitoring system hardware and software resources in accordance with the one or more statements of the rule.
27. (Currently Amended) ~~A computer program product including~~ a computer readable medium having computer readable executable program code embodied thereon for providing a method of authoring rules for asynchronous processing, the method comprising, composing a rule of one or more statements that facilitate decomposing the rule into a subset of instructions that are independently scheduled for out-of order execution representative of an infinite loop, the rules processed to perform at least one of testing assertions, enforcing constraints using runtime information, making inferences, performing correlation, ~~[[and]]~~ or communicating results of dynamic tests to other components.